CARDIAC ARREST - ADULT

FIELD ASSESSMENT/TREATMENT INDICATORS

Cardiac arrest in a non-traumatic setting.

BLS INTERVENTIONS

1. Assess patient, begin CPR according to current AHA Guidelines, and maintain appropriate airway.

    a. Compression rate shall be 100 per minute utilizing 30:2 compression-to-ventilation ratio for synchronous CPR prior to placement of advanced airway.

    b. Ventilatory volumes shall be sufficient to cause adequate chest rise.

2. If available, place AED per ICEMA Reference #10130 - Automatic External Defibrillation (AED) - BLS. CPR is **not** to be interrupted except briefly for rhythm assessment.

LIMITED ALS (LALS) INTERVENTIONS

1 Initiate CPR while applying the AED.

2. Establish advanced airway when resources are available, with minimal interruption to CPR. After advanced airway established, compressions would then be continued at 100 per minute without pauses during ventilations.

3. Establish peripheral intravenous access and administer a 500 ml bolus.

4. See ICEMA Reference #12010, Determination of Death on Scene.

Utilize the following treatment modalities while managing the cardiac arrest patient:

1. Obtain blood glucose, if indicated; administer Dextrose 50% 25 g IV.

2. Naloxone 2.0 mg IM/IN for suspected opiate overdose.

NOTE

Base Station contact is <u>required</u> to terminate resuscitative measures.

ALS INTERVENTIONS

1 Initiate CPR while applying the cardiac monitor.

2. Determine cardiac rhythm and defibrillate if indicated. Begin a two (2) minute cycle of CPR.

3. Obtain IV/IO access.

4. Establish advanced airway when resources are available, with minimal interruption to CPR. After advanced airway established, compressions would then be continued at 100/min without pauses during ventilations. Ventilations should be given at a rate of one (1) breath every six (6) to eight (8) seconds.

5. Utilize continuous quantitative waveform capnography, if available, for confirmation and monitoring of endotracheal tube placement and for assessment of ROSC. For agencies with waveform capnography, document the shape of the wave and the capnography number in mmHG.

Ventricular Fibrillation/Pulseless Ventricular Tachycardia

1. Defibrillate at 360 joules for monophasic or biphasic equivalent per manufacture. If biphasic equivalent is unknown use maximum available.

2. Perform CPR for two (2) minutes after each defibrillation, without delaying to assess the post-defibrillation rhythm.

3. Administer Epinephrine 1.0 mg IV/IO during each two (2) minute cycle of CPR after every defibrillation unless capnography indicates possible ROSC.

4. Reassess rhythm after each two (2) minute cycle of CPR. If VF/VT persists, defibrillate as above.

5. After two (2) cycles of CPR, consider administering Lidocaine 1.5 mg/kg IV/IO. May repeat at 0.75 mg/kg every five (5) minutes to maximum dose of 3.0 mg/kg.

6. If patient remains in pulseless VF/VT after five (5) cycles of CPR, consult Base Station.

Pulseless Electrical Activity (PEA) or Asystole

1. Assess for reversible causes and initiate treatment.

2. Continue CPR with evaluation of rhythm every two (2) minutes.

3. Administer fluid bolus of 300 ml NS IV, may repeat.

4. Administer Epinephrine 1.0 mg IV/IO during each two (2) minute cycle of CPR after each rhythm evaluation.

Utilize the following treatment modalities while managing the cardiac arrest patient:

1. Insert NG/OG Tube to relieve gastric distension per ICEMA Reference #10080 - Insertion of Nasogastric/Orogastric Tube.

2. Obtain blood glucose. If indicated, administer Dextrose 50% 25 gms IV.

3. Naloxone 2.0 mg IV/IO/IM for suspected opiate overdose.

Termination of Efforts in the Prehospital Setting

1. The decision to terminate efforts in the field should take into consideration, first, the safety of personnel on scene, and then family and cultural considerations.

2. Consider terminating resuscitative efforts in the field if ALL of the following criteria are met:

    a. No shocks were delivered.

    b. No ROSC after a minimum of ten (10) minutes of advance cardiac life support (ACLS).

3. Base Station contact is <u>required</u> to terminate resuscitative measures. A copy of the ECG should be attached to the patient care report for documentation purposes.

NOTE

1. If ROSC is achieved, obtain a 12-lead ECG.

2. Utilize continuous waveform capnography, if available, to identify loss of circulation.

3. For continued signs of inadequate tissue perfusion after successful resuscitation a Dopamine infusion of 400 mg in 250 ml of NS may be initiated at 5 - 10 mcg/kg/min IV to maintain signs of adequate tissue perfusion.

4. Base Station physician may order additional medications or interventions as indicated by patient condition.

REFERENCES

Number	**Name**
10080	Insertion of Nasogastric/Orogastric Tube
10130	Automatic External Defibrillation (AED) - BLS
12010	Determination of Death On Scene